FIG. 1

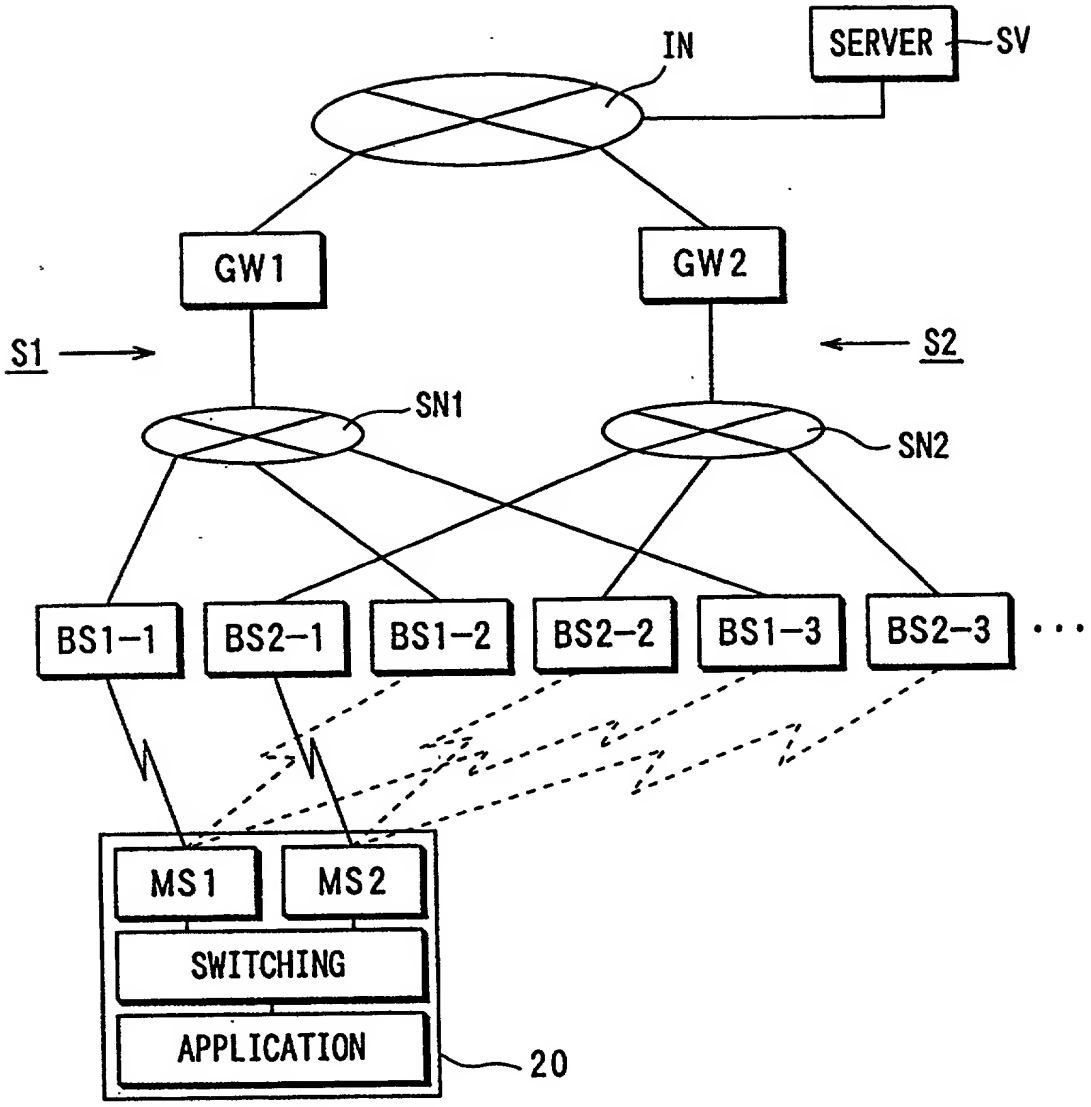

IN
SERVER
SV
GW1
GW2
S1
S2
SN1
SN2
BS1-1
BS2-1
BS1-2
BS2-2
BS1-3
BS2-3
MS1
MS2
SWITCHING
APPLICATION
20

FIG. 2

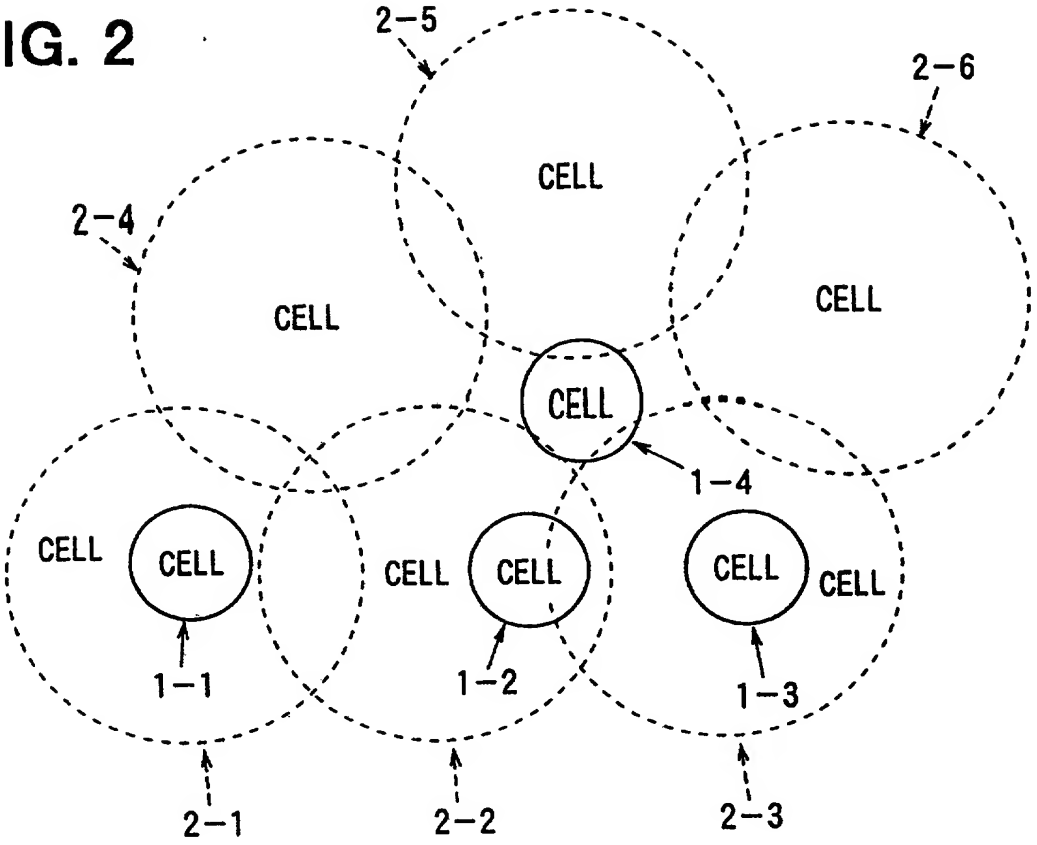

2-5
2-6
2-4
CELL
CELL
CELL
CELL
CELL
CELL
CELL
CELL
CELL
CELL
1-4
1-1
1-2
1-3
2-1
2-2
2-3

FIG. 3

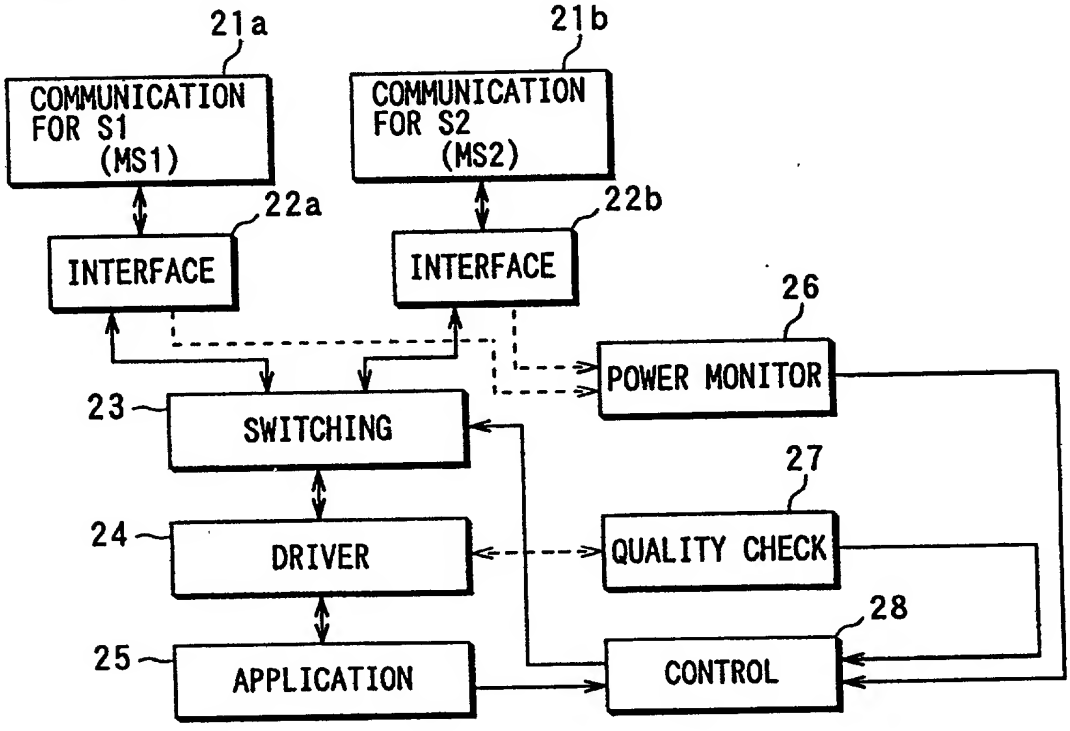

21a
21b
COMMUNICATION FOR S1 (MS1)
COMMUNICATION FOR S2 (MS2)
22a
22b
INTERFACE
INTERFACE
26
POWER MONITOR
23
SWITCHING
27
24
DRIVER
QUALITY CHECK
28
25
APPLICATION
CONTROL

FIG. 4

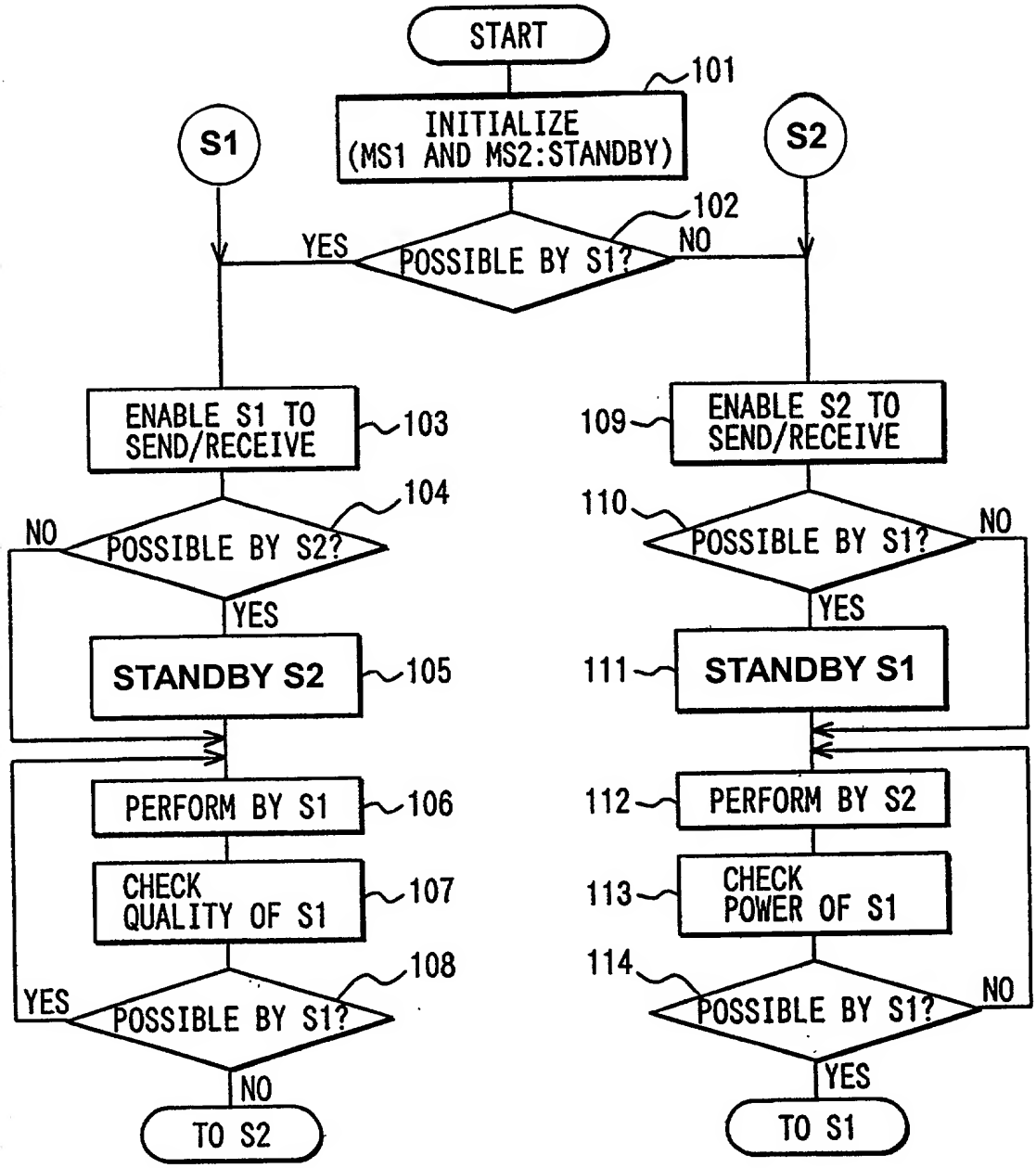

START
101
INITIALIZE
(MS1 AND MS2:STANDBY)
S1
S2
102
YES
POSSIBLE BY S1?
NO
ENABLE S1 TO
SEND/RECEIVE
103
104
NO
POSSIBLE BY S2?
YES
STANDBY S2
105
PERFORM BY S1
106
CHECK
QUALITY OF S1
107
108
YES
POSSIBLE BY S1?
NO
TO S2
109
ENABLE S2 TO
SEND/RECEIVE
110
POSSIBLE BY S1?
NO
YES
111
STANDBY S1
112
PERFORM BY S2
113
CHECK
POWER OF S1
114
POSSIBLE BY S1?
NO
YES
TO S1

FIG. 5

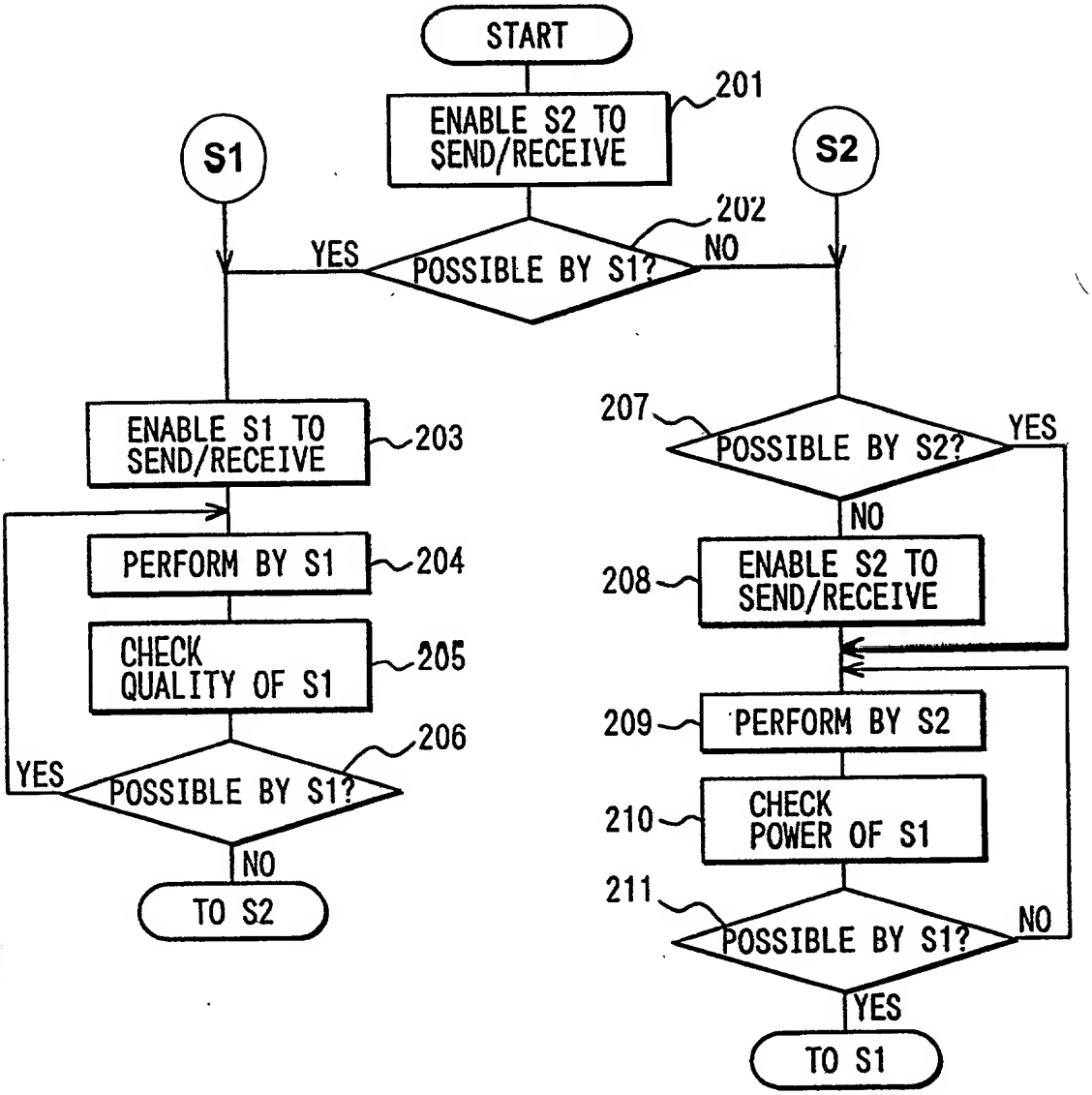

START
ENABLE S2 TO SEND/RECEIVE
201
S1
S2
202
YES
POSSIBLE BY S1?
NO
ENABLE S1 TO SEND/RECEIVE
203
PERFORM BY S1
204
CHECK QUALITY OF S1
205
206
YES
POSSIBLE BY S1?
NO
TO S2
207
POSSIBLE BY S2?
YES
NO
208
ENABLE S2 TO SEND/RECEIVE
209
PERFORM BY S2
210
CHECK POWER OF S1
211
POSSIBLE BY S1?
NO
YES
TO S1

FIG. 6

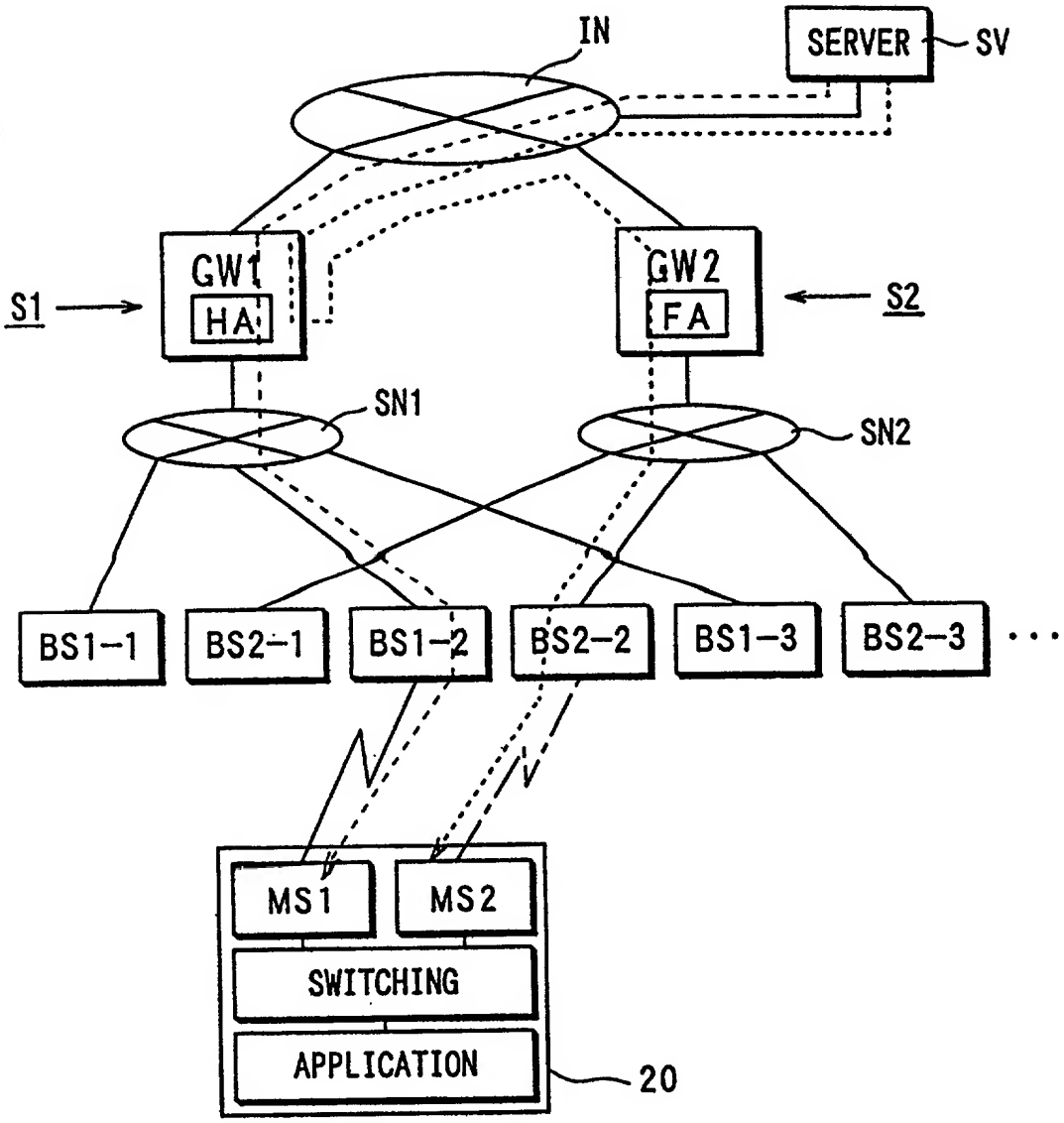

IN
SERVER
SV
GW1
HA
GW2
FA
S1
S2
SN1
SN2
BS1-1
BS2-1
BS1-2
BS2-2
BS1-3
BS2-3
MS1
MS2
SWITCHING
APPLICATION
20

FIG. 7

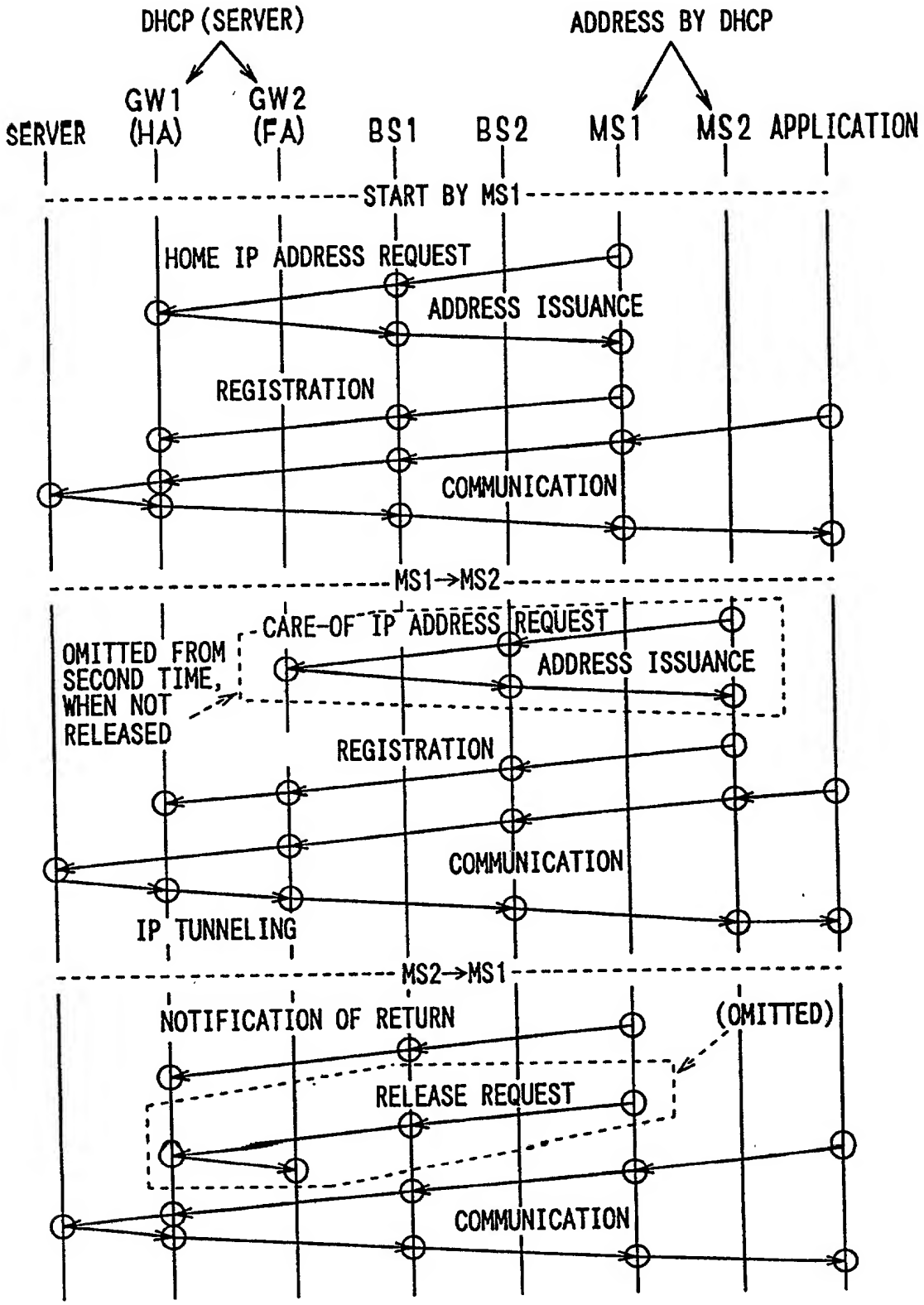

DHCP (SERVER)
ADDRESS BY DHCP
GW1 (HA)
GW2 (FA)
SERVER
BS1
BS2
MS1
MS2
APPLICATION
START BY MS1
HOME IP ADDRESS REQUEST
ADDRESS ISSUANCE
REGISTRATION
COMMUNICATION
MS1→MS2
CARE-OF IP ADDRESS REQUEST
ADDRESS ISSUANCE
OMITTED FROM SECOND TIME, WHEN NOT RELEASED
REGISTRATION
COMMUNICATION
IP TUNNELING
MS2→MS1
NOTIFICATION OF RETURN
(OMITTED)
RELEASE REQUEST
COMMUNICATION

FIG. 8

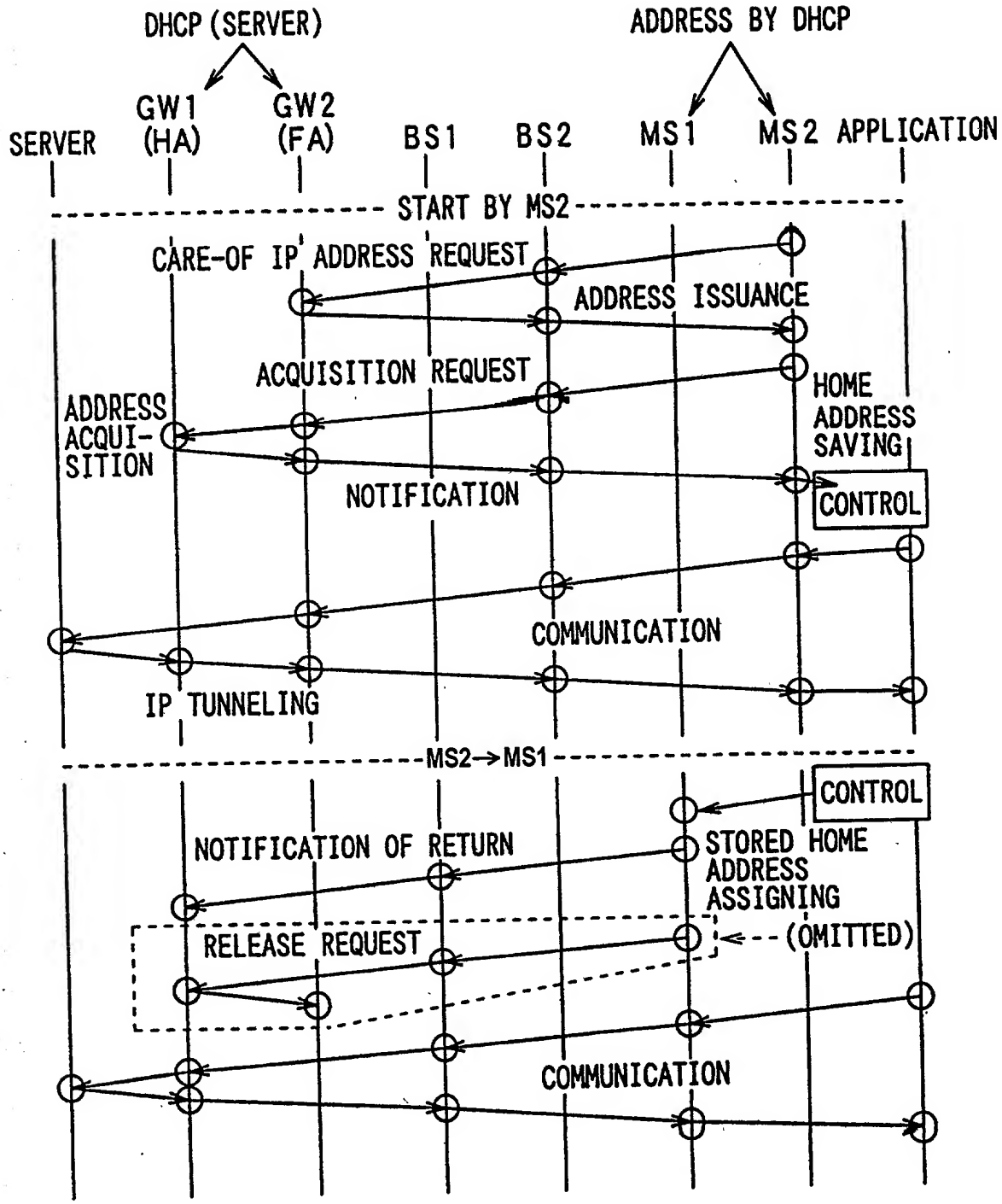

DHCP (SERVER)
ADDRESS BY DHCP
GW1 (HA)
GW2 (FA)
SERVER
BS1
BS2
MS1
MS2
APPLICATION
START BY MS2
CARE-OF IP ADDRESS REQUEST
ADDRESS ISSUANCE
ACQUISITION REQUEST
HOME ADDRESS SAVING
ADDRESS ACQUI-SITION
NOTIFICATION
CONTROL
COMMUNICATION
IP TUNNELING
MS2→MS1
CONTROL
NOTIFICATION OF RETURN
STORED HOME ADDRESS ASSIGNING
RELEASE REQUEST
(OMITTED)
COMMUNICATION

FIG. 9

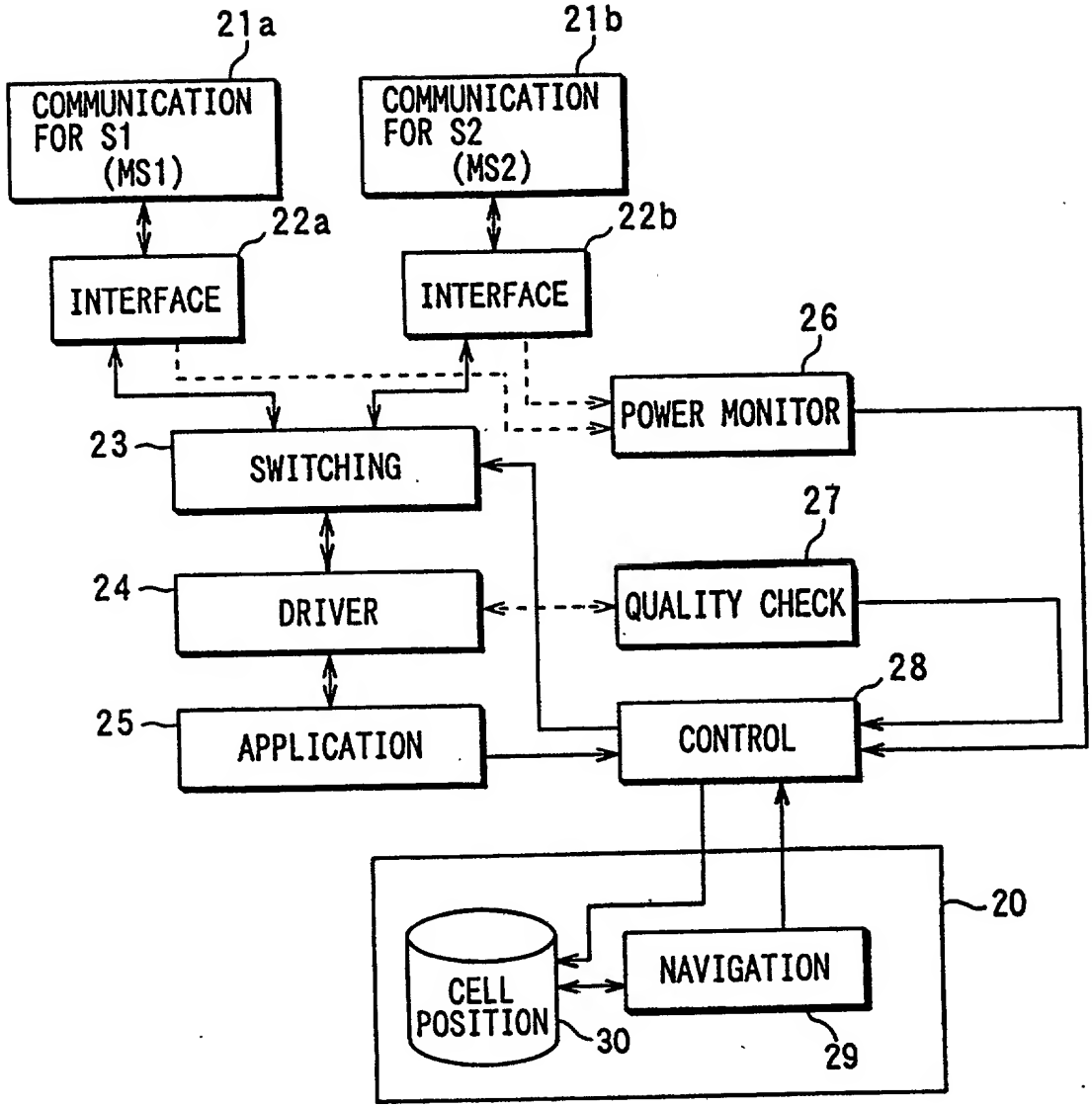

21a
21b
COMMUNICATION FOR S1 (MS1)
COMMUNICATION FOR S2 (MS2)
22a
22b
INTERFACE
INTERFACE
26
POWER MONITOR
23
SWITCHING
27
24
DRIVER
QUALITY CHECK
28
25
APPLICATION
CONTROL
20
CELL POSITION
30
NAVIGATION
29

FIG. 10

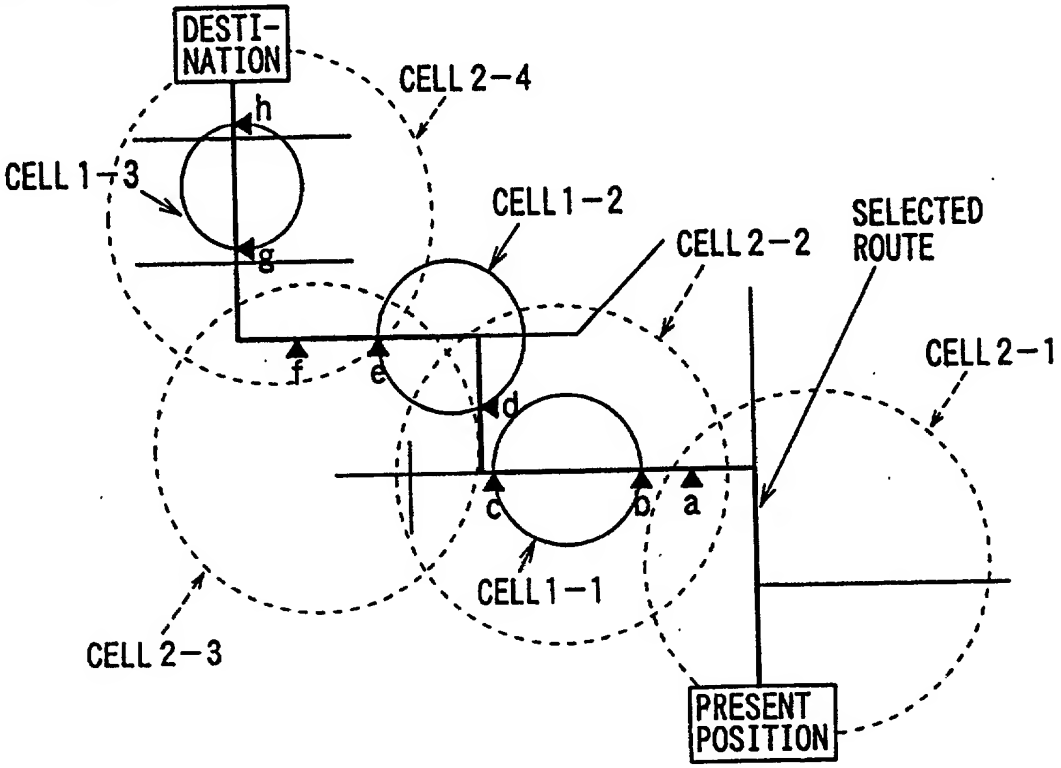


FIG. 11

SWITCHING POINT	CELL
	2-1
a	
	2-2
b	
	1-1
c	
	2-2
d	
	1-2
e	
	2-3
f	
	2-4
g	
	1-3
h	
	2-4

MS1/MS2
SWITCHING POINT

FIG. 12

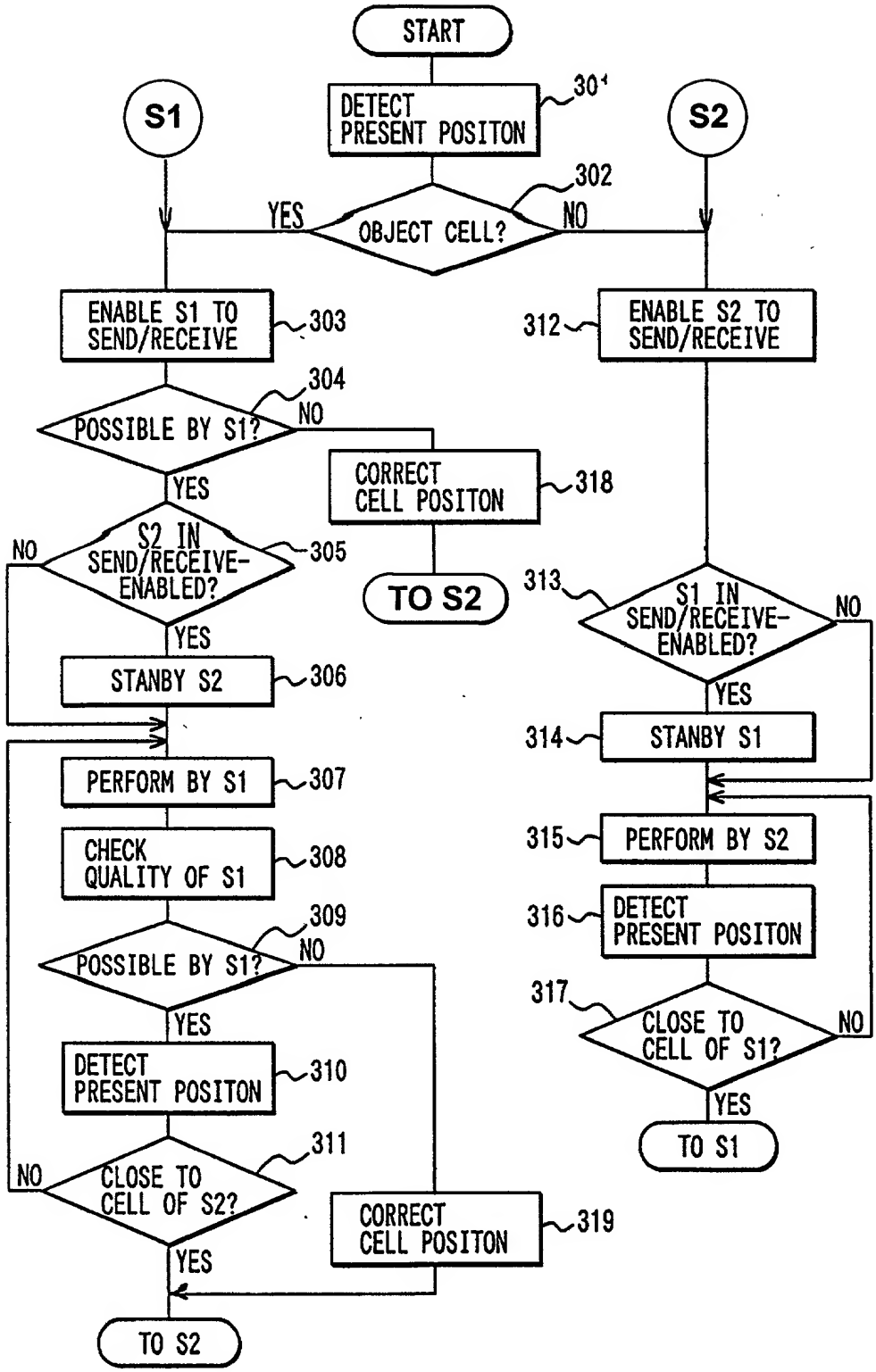

START
S1
S2
DETECT PRESENT POSITON
301
OBJECT CELL?
302
YES
NO
ENABLE S1 TO SEND/RECEIVE
303
ENABLE S2 TO SEND/RECEIVE
312
POSSIBLE BY S1?
304
NO
YES
CORRECT CELL POSITON
318
TO S2
S2 IN SEND/RECEIVE-ENABLED?
305
NO
YES
STANBY S2
306
S1 IN SEND/RECEIVE-ENABLED?
313
NO
YES
STANBY S1
314
PERFORM BY S1
307
PERFORM BY S2
315
CHECK QUALITY OF S1
308
DETECT PRESENT POSITON
316
POSSIBLE BY S1?
309
NO
YES
CLOSE TO CELL OF S1?
317
NO
YES
TO S1
DETECT PRESENT POSITON
310
CLOSE TO CELL OF S2?
311
NO
YES
CORRECT CELL POSITON
319
TO S2

FIG. 13

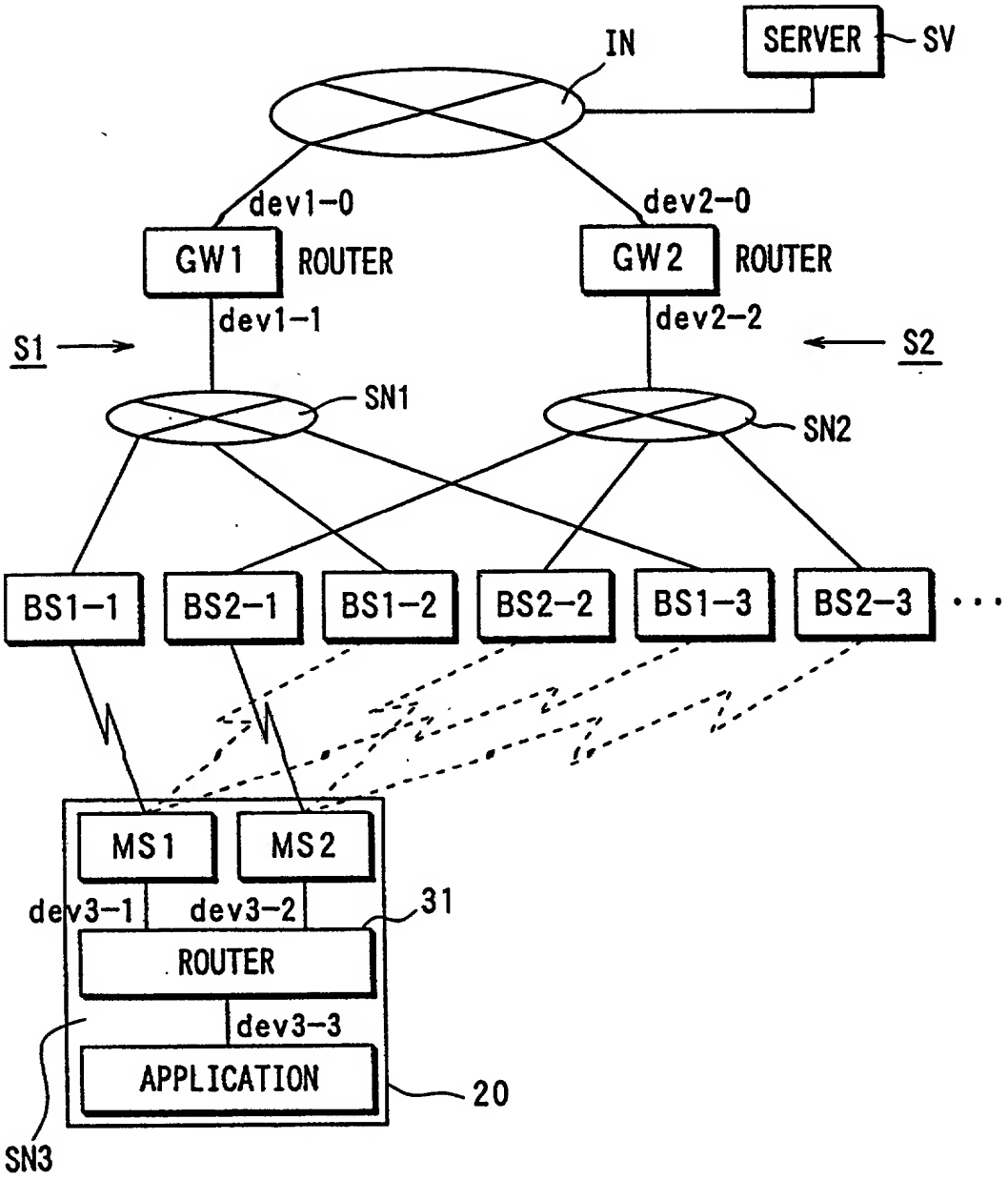

IN
SERVER
SV
dev1-0
dev2-0
GW1
ROUTER
GW2
ROUTER
dev1-1
dev2-2
S1
S2
SN1
SN2
BS1-1
BS2-1
BS1-2
BS2-2
BS1-3
BS2-3
MS1
MS2
dev3-1
dev3-2
31
ROUTER
dev3-3
APPLICATION
20
SN3

FIG. 14

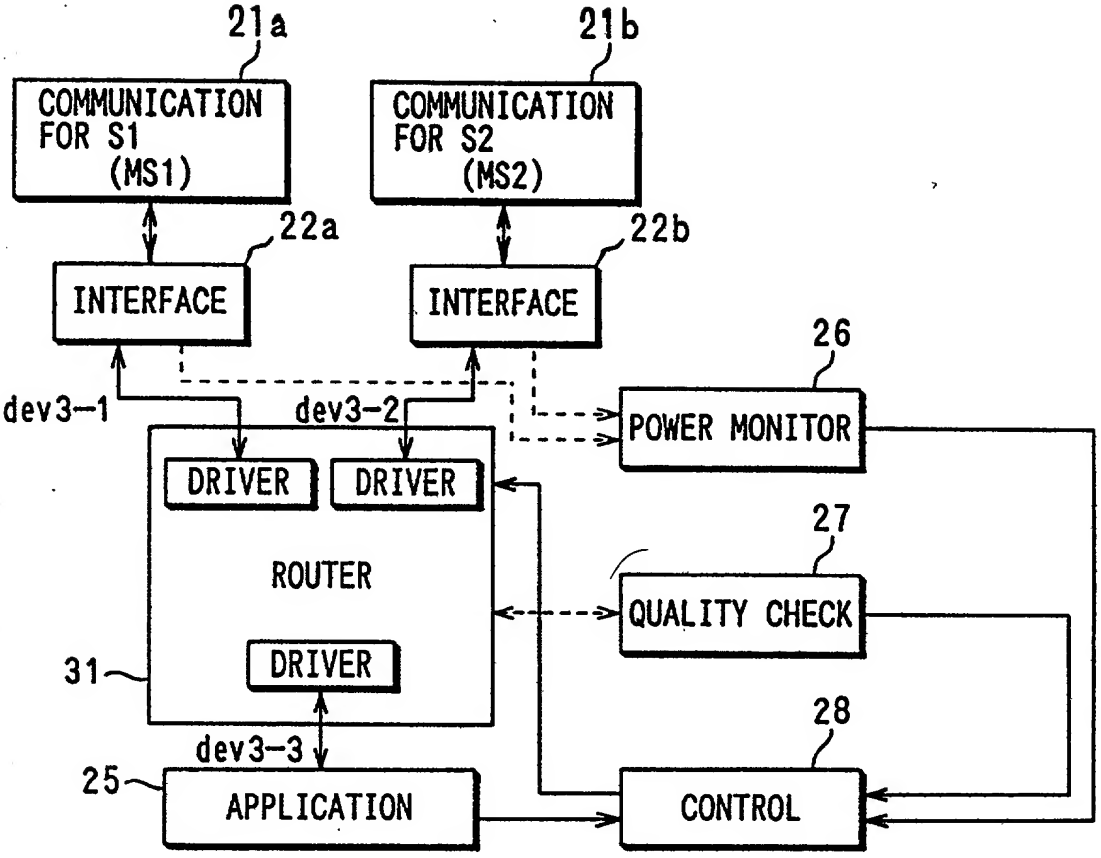

21a
21b
COMMUNICATION FOR S1 (MS1)
COMMUNICATION FOR S2 (MS2)
22a
22b
INTERFACE
INTERFACE
26
dev3-1
dev3-2
POWER MONITOR
DRIVER
DRIVER
ROUTER
27
QUALITY CHECK
31
DRIVER
28
dev3-3
25
APPLICATION
CONTROL

FIG. 15

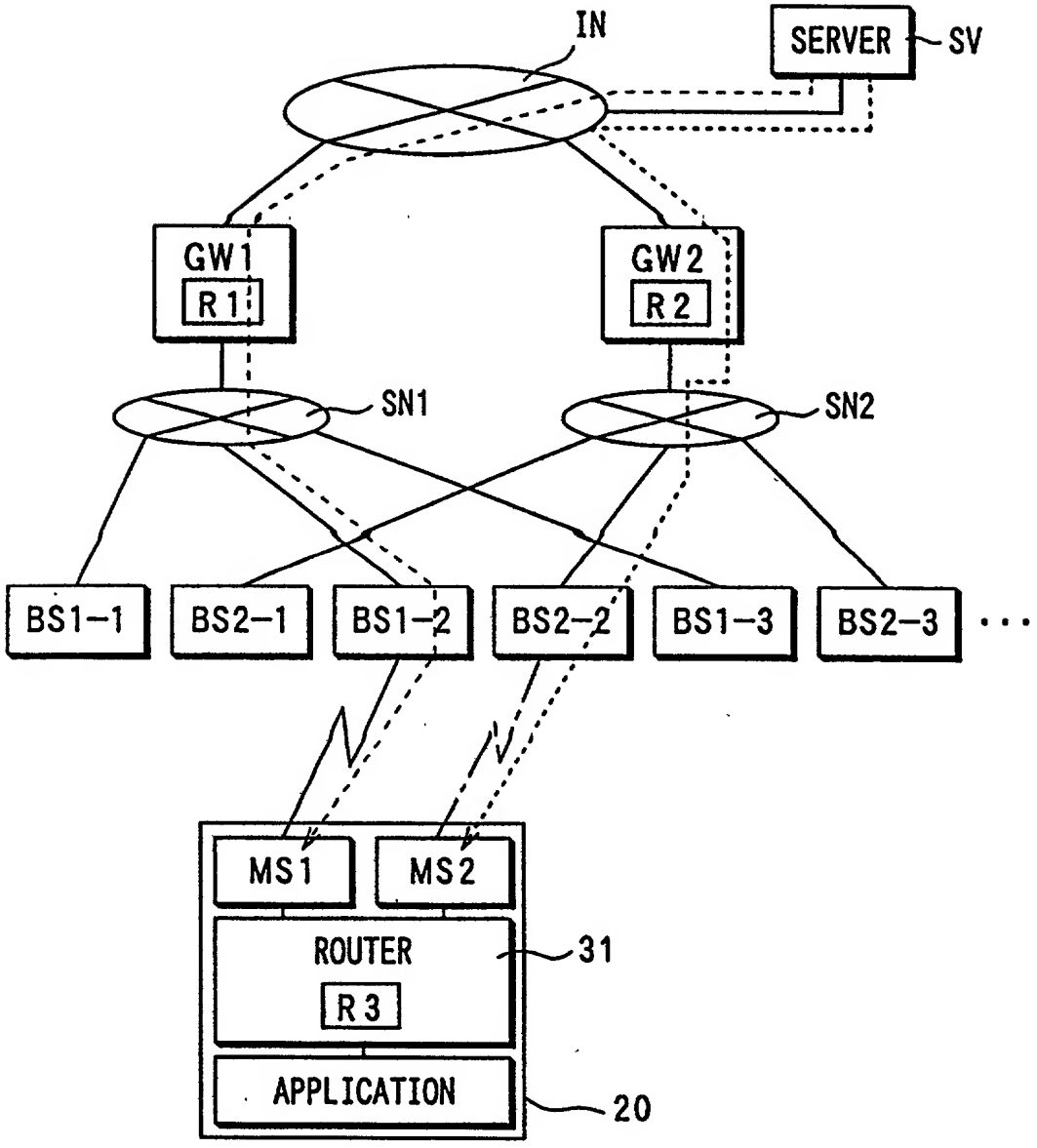

IN
SERVER
SV
GW1
R1
GW2
R2
SN1
SN2
BS1-1
BS2-1
BS1-2
BS2-2
BS1-3
BS2-3
MS1
MS2
ROUTER
R3
31
APPLICATION
20

FIG. 16A

ROUTING TABLE R1 OF GW1

NETWORK	DEVICE
SN1	dev1-1
SN3	dev1-1
OTHER	dev1-0

ROUTING TABLE R2 OF GW2

NETWORK	DEVICE
SN2	dev2-2
OTHER	dev2-0

ROUTING TABLE R3 IN TERMINAL

NETWORK	DEVICE
SN3	dev3-3
OTHER	dev3-1

FIG. 16B

ROUTING TABLE R1 OF GW1

NETWORK	DEVICE
SN1	dev1-1
OTHER	dev1-0

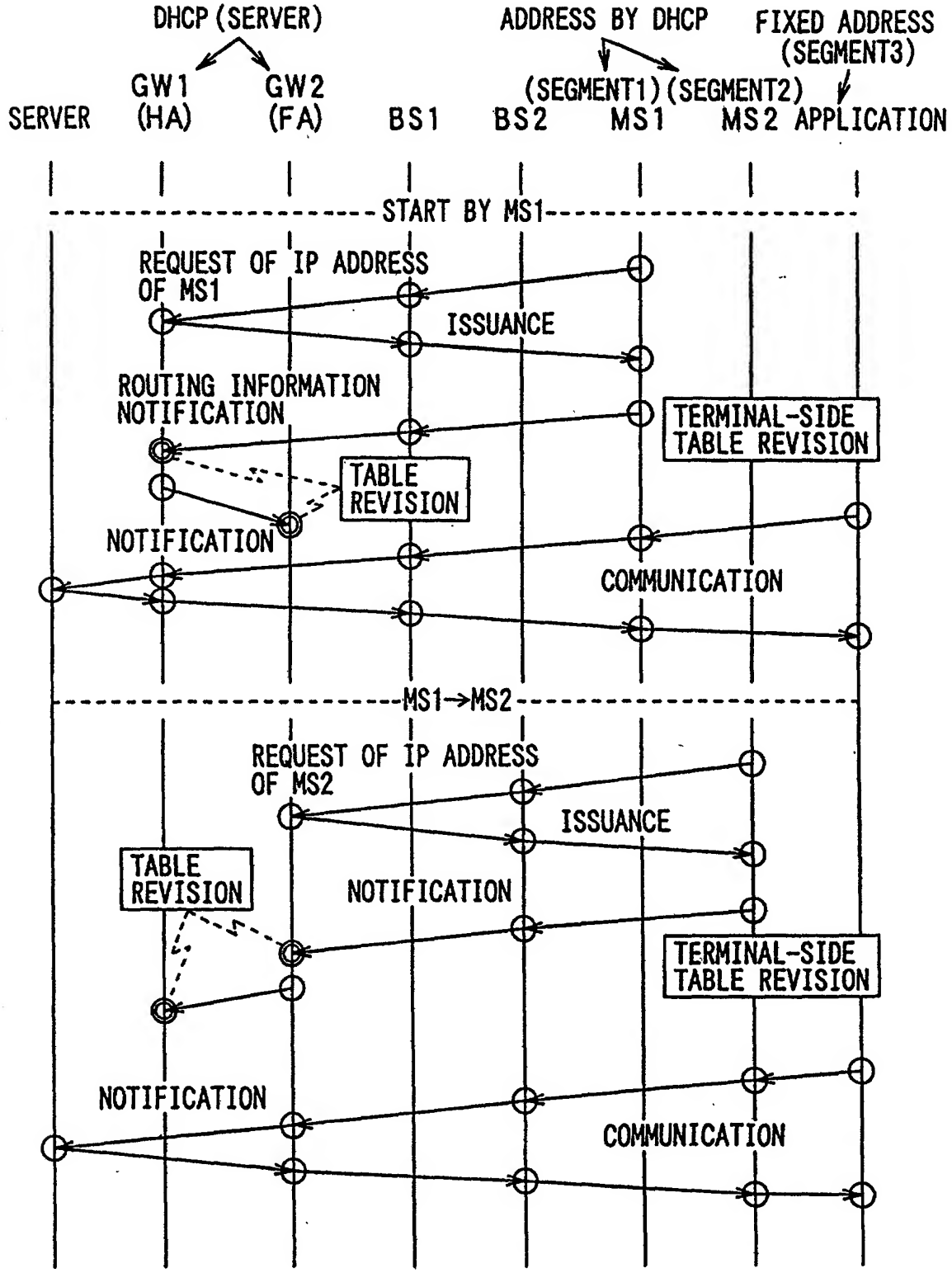
ROUTING TABLE R2 OF GW2

NETWORK	DEVICE
SN2	dev2-2
SN3	dev2-2
OTHER	dev2-0

ROUTING TABLE R3 IN TERMINAL

NETWORK	DEVICE
SN3	dev3-3
OTHER	dev3-2

FIG. 17


DHCP (SERVER)
ADDRESS BY DHCP
FIXED ADDRESS (SEGMENT3)
GW1 (HA)
GW2 (FA)
(SEGMENT1)
(SEGMENT2)
SERVER
BS1
BS2
MS1
MS2
APPLICATION
START BY MS1
REQUEST OF IP ADDRESS OF MS1
ISSUANCE
ROUTING INFORMATION NOTIFICATION
TERMINAL-SIDE TABLE REVISION
TABLE REVISION
NOTIFICATION
COMMUNICATION
MS1→MS2
REQUEST OF IP ADDRESS OF MS2
ISSUANCE
TABLE REVISION
NOTIFICATION
TERMINAL-SIDE TABLE REVISION
NOTIFICATION
COMMUNICATION